

2013 - 2014 Annual C.U.R.E. Report

Commonwealth Universal Research Enhancement



*CURE*



pennsylvania  
DEPARTMENT OF HEALTH

## Health Research Program

Pennsylvania Tobacco Settlement Act

Commonwealth of Pennsylvania  
Tom Wolf, Governor

Karen M. Murphy, Ph.D., R.N.  
Secretary of Health

## Message from the Secretary

On behalf of Governor Wolf, I am pleased to present the 2013-14 annual report of the Pennsylvania Commonwealth Universal Research Enhancement (CURE) Program. In June 2001, the Tobacco Settlement Act, or Act 2001-77, was signed into law, authorizing the Department of Health to establish the Health Research Program, which was designed to improve the delivery of health care, promote health, prevent disease and injury, and translate research advances to community health care practice.

Tobacco Master Settlement Agreement (MSA) funds are used to award grants to Pennsylvania-based organizations for biomedical research, clinical investigations and health services research. Over the past 13 years, the impact of the CURE Program has been immeasurable. Its depth and breadth of research discoveries have included new developments in smoking cessation, genome-based therapeutics, heart and lung disease, nutrition and obesity, addiction, as well as pancreatic, liver, breast and lung cancers and leukemia.

During the 2013-14 state fiscal year (SFY), no research grant funds were allocated to the CURE Program by the governor's office due to an arbitration ruling in September 2013 from an ongoing dispute between the commonwealth and tobacco manufacturers over an MSA payment.

However, since the program's inception, the Department of Health has awarded approximately \$797 million in CURE Program grants and has funded 1,933 health research projects. These grants fund laboratory construction, state-of-the-art research equipment acquisition and maintenance, ongoing research programs, and new research studies. Of the 397 research grants completed as of June 30, 2014, study findings have been reported in more than 2,053 peer-reviewed articles, and 93 patents have been filed. Researchers have leveraged an additional \$1.2 billion in funding to continue their research endeavors.

The CURE Program has led to new scientific knowledge that has helped improve public health for Pennsylvanians and for citizens nationwide. We invite you to read and learn more about this program through this annual report, as well as on the department's website at:

[www.health.pa.gov](http://www.health.pa.gov).



Karen M. Murphy, Ph.D., R.N.  
Secretary of Health

# Health Research Advisory Committee (as of June 30, 2014)

## Chair:

**Michael Wolf**  
Secretary of Health  
Commonwealth of Pennsylvania

## Members:

**Dwight Davis, M.D.**  
Professor of Medicine and Medical Director, Cardiac Rehabilitation Program  
Pennsylvania State University School of Medicine

**Karen Wolk Feinstein, Ph.D.**  
President  
Jewish Healthcare Foundation

**Lewis H. Kuller, M.D., Dr. P.H.**  
University Professor of Public Health and Professor of Epidemiology  
Graduate School of Public Health at the University of Pittsburgh

**Arthur S. Levine, M.D.**  
Senior Vice Chancellor for the Health Sciences and Dean, School of Medicine  
University of Pittsburgh

**Michael S. Parmacek, M.D.**  
Herbert C. Rorer Professor of Medical Sciences and Director, Penn Cardiovascular Institute  
University of Pennsylvania School of Medicine

**Michael V. Seiden, M.D., Ph.D.**  
President and Chief Executive Officer  
Fox Chase Cancer Center

**Lisa Staiano-Coico, Ph.D.**  
President  
The City College of New York

**Kim Smith-Whitley, M.D.**  
Assistant Professor of Pediatrics, Division of Hematology  
The Children's Hospital of Philadelphia

# Contents of the Annual 2013-14 CURE Program Report

The Annual 2013-14 CURE program report consists of an overview of the health research program, accomplishments of the program for the 2013-14 state fiscal year, and a financial report of grant awards and expenditures for the year. This report also includes separate annual progress reports for each grant recipient and a research development report on the commercialization of research for recipients of \$400,000 or more in formula funds, as listed below.

- Albert Einstein Healthcare Network
  - 2012 Formula Grant
- Allegheny-Singer Research Institute
  - 2011 Formula Grant
  - 2012 Formula Grant
- American College of Radiology
  - 2009 Formula Grant
  - 2010 Formula Grant
  - 2011 Formula Grant
  - 2012 Formula Grant
  - Research Development Report
- Apogee Biotechnology Corporation
  - 2011 Nonformula Grant on Commercialization of Research Related to Cancer Diagnostics and Therapeutics
- Baruch S. Blumberg Institute
  - 2011 Nonformula Grant on Commercialization of Research Related to Cancer Diagnostics and Therapeutics
- Carnegie Mellon University
  - 2009 Formula Grant
  - 2010 Formula Grant
  - 2011 Nonformula Grant on Commercialization of Research Related to Cancer Diagnostics and Therapeutics
  - 2011 Formula Grant
  - 2012 Formula Grant
  - Research Development Report
- Children's Hospital of Philadelphia
  - 2009 Formula Grant
  - 2010 Formula Grant
  - 2011 Formula Grant
  - 2012 Formula Grant
  - Research Development Report
- Children's Hospital of Pittsburgh
  - 2009 Formula Grant
  - 2010 Formula Grant
  - 2011 Formula Grant
- Drexel University
  - 2009 Nonformula Grant on Cancer Vaccines
  - 2009 Formula Grant
  - 2010 Formula Grant
  - 2011 Formula Grant
  - 2012 Formula Grant
  - Research Development Report
- Duquesne University
  - 2009 Formula Grant
  - 2010 Formula Grant
  - 2011 Formula Grant

- 2012 Formula Grant
- Geisinger Clinic
  - 2011 Nonformula Grant on Commercialization of Research Related to Cancer Diagnostics and Therapeutics
  - 2011 Nonformula Grant on Translational Genomics
  - 2012 Formula Grant
- Haverford College
  - 2010 Formula Grant
  - 2011 Formula Grant
  - 2012 Formula Grant
- Hepatitis B Foundation
  - 2012 Formula Grant
- Indiana University of Pennsylvania
  - 2010 Formula Grant
- Institute for Cancer Research (formerly Fox Chase Cancer Center)
  - 2009 Formula Grant
  - 2010 Formula Grant
  - 2011 Formula Grant
  - 2012 Formula Grant
  - Research Development Report
- Lankenau Institute for Medical Research
  - 2012 Formula Grant
- Lehigh University
  - 2009 Formula Grant
  - 2011 Formula Grant
  - 2012 Formula Grant
- Lincoln University
  - 2012 Formula Grant
- Magee-Womens Research Institute
  - 2012 Formula Grant
- Monell Chemical Senses Center
  - 2012 Formula Grant
- National Disease Research Interchange
  - 2012 Formula Grant
- National Surgical Adjuvant Breast and Bowel Project (NSABP) Foundation
  - 2009 Formula Grant
  - 2010 Formula Grant
  - 2011 Formula Grant
  - 2012 Formula Grant
  - Research Development Report
- Oncocutics, Inc.
  - 2011 Nonformula Grant on Commercialization of Research Related to Cancer Diagnostics and Therapeutics
- Pennsylvania State University
  - 2009 Formula Grant
  - 2010 Nonformula Grant on Substance Abuse
  - 2010 Formula Grant
  - 2011 Nonformula Grant on Commercialization of Research Related to Cancer Diagnostics and Therapeutics
  - 2011 Formula Grant
  - 2012 Formula Grant
  - Research Development Report
- Philadelphia College of Osteopathic Medicine
  - 2009 Formula Grant
  - 2010 Formula Grant
  - 2011 Formula Grant

- 2012 Formula Grant
- Salus University
- 2012 Formula Grant
- Temple University
- 2009 Formula Grant
  - 2010 Formula Grant
  - 2011 Formula Grant
  - 2012 Formula Grant
  - Research Development Report
- Thomas Jefferson University
- 2009 Nonformula Grant on Cancer Vaccines
  - 2009 Formula Grant
  - 2010 Formula Grant
  - 2011 Nonformula Grant on Commercialization of Research Related to Cancer Diagnostics and Therapeutics
  - 2011 Formula Grant
  - 2012 Formula Grant
  - Research Development Report
- Treatment Research Institute
- 2010 Nonformula Grant on Substance Abuse
  - 2011 Formula Grant
  - 2012 Formula Grant
- UE LifeSciences Inc.
- 2011 Nonformula Grant on Commercialization of Research Related to Cancer Diagnostics and Therapeutics
- University of Pennsylvania
- 2009 Nonformula Grant on Blindness and Visual Impairment
  - 2009 Nonformula Grant on Cancer Vaccines
  - 2009 Formula Grant
  - 2010 Nonformula Grant on Substance Abuse
  - 2010 Formula Grant
  - 2011 Nonformula Grant on Commercialization of Research Related to Cancer Diagnostics and Therapeutics
  - 2011 Nonformula Grant on Translational Genomics
  - 2011 Formula Grant
  - 2012 Formula Grant
  - Research Development Report
- University of Pittsburgh
- 2009 Formula Grant
  - 2010 Nonformula Grant on Substance Abuse
  - 2010 Formula Grant
  - 2011 Formula Grant
  - 2012 Formula Grant
  - Research Development Report
- University of the Sciences in Philadelphia
- 2011 Formula Grant
  - 2012 Formula Grant
- Wills Eye Health System
- 2009 Nonformula Grant on Blindness and Visual Impairment
- Wistar Institute of Anatomy and Biology
- 2011 Nonformula Grant on Commercialization of Research Related to Cancer Diagnostics and Therapeutics
  - 2012 Formula Grant
  - Research Development Report

# Health Research Program Overview and Accomplishments

## Overview

Act 2001-77, the Tobacco Settlement Act, authorized the Pennsylvania Department of Health to establish the Commonwealth Universal Research Enhancement (CURE) Program to fund health research using tobacco settlement monies. Of the tobacco settlement funds, 13.6 percent (called “formula funds”) are awarded by formula to institutions that have previously received awards from the National Institutes of Health (NIH) and National Cancer Institute (NCI); 5.4 percent (called “nonformula funds”) are awarded by competitive peer review.

The CURE program provides broad-based health research grants to Pennsylvania-based researchers, universities, medical schools, and other institutions. A grant may be used to support more than one research project, but all research projects must be completed within 48 months of the start of the grant. Research projects may focus on basic biomedical research, patient-oriented clinical investigations, or health services research. Up to 50 percent of the grant funds may be spent on infrastructure, which is defined in Act 149 of 2002 and includes office equipment and supplies, nonprofessional personnel, and laboratory or building construction or renovations used to conduct research.

Health research funds are awarded to projects that are consistent with the program’s research priorities. These priorities are determined by the department in conjunction with the Health Research Advisory Committee. In developing the research priorities, consideration is given to the national health promotion and disease prevention objectives as applied to Pennsylvania. Priorities focus on critical research areas and the disparities in health status that occur among various populations within the commonwealth.

Each year, recipients of health research grant awards report progress on research projects. This information is used to compile the annual report to the legislature. This year’s annual report, as well as past reports, can be found at [www.health.state.pa.us/cure](http://www.health.state.pa.us/cure). This website is continually updated with the most recent information about the health research program, including announcements concerning research priorities, request for applications, and meetings of the Health Research Advisory Committee.

## Health Research Advisory Committee

Chaired by the secretary of health, this nine-member advisory committee provides advice and recommendations on research priorities, grant accountability and evaluation procedures, and other related issues. Health research grants awarded by the CURE Program must address research priorities, which are established by the department in conjunction with the Health Research Advisory Committee. The research priorities are reviewed and revised as needed. During the state fiscal year (SFY) 2013-14, funds for health research grants were unavailable for disbursement due to an arbitration ruling in September 2013 from an ongoing dispute between the commonwealth and tobacco manufacturers over a Tobacco Master Settlement Agreement (MSA) payment. Therefore, the Health Research Advisory Committee, with no need to revise

the research priorities and no other business on which to act, did not meet during this state fiscal year.

## **Health Research Priorities and Grant Awards**

Separate health research priorities are established for formula and nonformula funds. The health research priorities for the formula funds have remained unchanged since the first year of the program, while the research priorities for the nonformula funds are revised every year that nonformula grants are awarded. The department did not identify priorities for the 2013-14 state fiscal year and did not award research grants because funds for research grants were not available. Research priorities for years prior to 2013-14 may be viewed at the CURE Web page ([www.health.state.pa.us/cure](http://www.health.state.pa.us/cure)) under the “CURE Health Research Priorities” link.

## **Program Measures for Completed Grants**

### **Number and Amount of Completed Grants**

As of June 30, 2014, a total of 359 formula grantees and 38 nonformula grantees had completed their grants and submitted final progress reports summarizing the results of their research accomplishments. Although the amount of the grant awards for formula grants varied considerably (\$700 to over \$10 million), 43 percent of the awards were for amounts equal to or less than \$100,000.

<b>Number of Grants Completed by June 30, 2014: Amount of Awards by Type</b>			
<b>Amount of Award</b>	<b>Number of Formula Grant Awards</b>	<b>Number of Nonformula Grant Awards</b>	<b>Number of Total Grant Awards</b>
\$100,000 or less	155	0	155
More than \$100,000	204	38	242
<b>All grants</b>	<b>359</b>	<b>38</b>	<b>397</b>

### **Publications**

Since the goal of research is to discover new scientific knowledge, an appropriate measure of the extent to which the health research grants achieve this goal is the publication of research findings in peer-reviewed journals. A total of 163 formula grantees reported that their research resulted in peer-reviewed publications. They cited a total of 1,801 peer-reviewed publications. An additional 182 publications had been submitted for review but were awaiting a decision at the time the grantees had submitted their final reports. Thirty-two nonformula grantees reported 252 peer-reviewed publications resulting from funded research and 41 additional submissions awaiting a publication decision.

## Leveraging of Additional Grants

On the final progress report, grantees are asked to list funds that they obtained as a result of the health research funds provided to them through the CURE Program. More than half (52 percent) of all grantees reported leveraging additional grants. A total of 174 formula grant recipients reported obtaining \$986 million as a result of the CURE funds provided to them. Thirty-four (34) nonformula grant recipients reported obtaining additional grants totaling \$264 million. The total amount of additional funding leveraged was two times the amount of the original CURE grant awards.

<b>Grants Completed by June 30, 2014: Original Grant Awards and Additional Funds Obtained by Type of Award</b>			
	Formula Grants	Nonformula Grants	Total Grants
Amount of original CURE grant awards	\$468,894,591	\$155,017,724	\$623,912,315
Amount of additional grants obtained	\$986,076,450	\$263,676,367	\$1,249,752,817
Percentage of grants that obtained additional funding	48%	89%	52%
Return on investment	210%	170%	200%

## Performance Review

### Overview of the Process

According to Act 2001-77, any applicant that receives a health research grant is subject to a performance review at the end of the research project or more often as deemed necessary by the department. The department contracted with Oak Ridge Associated Universities (ORAU) to oversee and manage the performance review process. Two types of performance reviews are performed each year: (1) final performance reviews for grantees that have completed their research projects; and (2) interim performance reviews of nonformula grants when they are partially completed. The performance reviews are based on the requirements specified in Act 2001-77 and the criteria developed by the department in consultation with the Health Research Advisory Committee.

The following criteria are applied to every project contained in the formula grant using information submitted by research grant recipients. The criteria for formula and nonformula grants are slightly different. Formula grants are not selected by a peer review process, whereas nonformula grants are subject to peer review prior to selection for funding by the department. Therefore, for nonformula grants, the performance reviewers are not asked to consider questions

that were considered during peer review, e.g., questions concerning the significance of the project for improving health and adequacy of research design.

## **Formula Grant Evaluation Criteria**

### **How well did the project meet its stated objectives? If objectives were not completely met, was reasonable progress made?**

- Did the project meet the stated objectives?
- Were the research design and methods adequate in light of the project objectives?
- Consider these questions about data and empirical results: Were the data developed sufficiently to answer the research questions posed? Were the data developed in line with the original research protocol?
- If changes were made to the research protocol, was an explanation given, and, if so, is it reasonable?
- Consider (only for clinical research projects) the extent of laboratory and clinical activities initiated and completed and the number of subjects relative to the target goal.
- Were sufficient data and information provided to indicate or support the fact that the project met its objectives or made acceptable progress?
- Were the data and information provided applicable to the project objectives listed in the strategic research plan?

### **What is the likely beneficial impact of this project? If the likely beneficial impact is small, is it judged reasonable in light of the dollars budgeted?**

- What is the significance of this project for improving health?
- Consider the value of the research completed toward eventual improvement in health outcomes.
- Consider any changes in risk factors, services provided, incidence of disease, death from disease, stage of disease at time of diagnosis, or other relevant measures of impact and effectiveness of the research being conducted.
- Consider any major discoveries, new drugs, and new approaches for prevention, diagnosis, and treatment that are attributable to the completed research project.
- What are the future plans for this research project?

### **Did the project leverage additional funds, or were additional grant applications submitted as a result of the project?**

- If leveraging of funds was expected, did these funds materialize?
- Are the researchers planning to apply for additional funding in the future to continue or expand the research?

### **Did the project result in any peer-reviewed publications, licenses, patents, or commercial development opportunities? Were any of these submitted/filed?**

- If any of the above listed were expected, did these materialize?

- Are the researchers planning to submit articles to peer-reviewed publications, file for any licenses or patents, or begin any commercial development opportunities in the future?
- Consider the number/quality of each.

**Did the project enhance the quality and capacity for research at the grantee's institution?**

- Were there improvements made to infrastructure?
- Were any new investigators added, or were any researchers brought into the institution to help carry out this research?
- Were funds used to pay for research performed by pre- or post-doctoral students?

**Did the project lead to collaboration with research partners outside of the institution or new involvement with the community?**

- Are the researchers planning to begin any collaborations as a result of the research?
- For clinical research only: Consider the number of hospitals and health care professionals involved and the extent of penetration of the studies throughout the region or the commonwealth.

**Nonformula Grant Evaluation Criteria**

**How well did the grant meet its stated objectives? If objectives were not completely met, was reasonable progress made?**

- Did the grant meet the stated objectives?
- Consider these questions about the data and empirical results: Were the data developed sufficiently to answer the research questions posed? Were the data developed in line with the original research protocol?
- If changes were made to the research protocol, was an explanation given, and, if so, was it reasonable?
- Consider (only for clinical research grants) the extent of laboratory and clinical activities initiated and completed and the number of subjects relative to the target goal.
- Were sufficient data and information provided to indicate or support the fact that the project met its objectives or made acceptable progress?
- Were the data and information provided applicable to the project objectives listed in the strategic plan?

**What is the likely beneficial impact of this grant? If the likely beneficial impact is small, is it judged reasonable in light of the dollars budgeted?**

- Consider any changes in risk factors, services provided, incidence of disease, death from disease, stage of disease at time of diagnosis, or other relevant measures of impact and effectiveness of the research being conducted.
- Consider any major discoveries, new drugs, and new approaches for prevention, diagnosis, and treatment that are attributable to the completed research grant.

- What are the future plans for this research grant?

**Did the grant leverage additional funds or were additional grant applications submitted?**

- If leveraging of funds was expected, did these funds materialize?
- Are the researchers planning to apply for additional funding in the future to continue or expand the research?

**Did the grant result in any peer-reviewed publications, licenses, patents, or commercial development opportunities? Were any of these submitted/filed?**

- If any of the above listed were expected, did these materialize?
- Are the researchers planning to submit articles to peer-reviewed publications, file for any licenses, or patents or begin any commercial development opportunities in the future?
- Consider the number/quality of each and what was proposed in the original application.

**Did the grant enhance the quality and capacity for research at the grantee's institution?**

- If any improvements in infrastructure were expected, were they made?
- Were any new investigators added, or were any researchers brought into the institution to help carry out this research?
- Were funds used to pay for research performed by pre- or post-doctoral students?

**Did the grant lead to collaboration with research partners outside of the institution or new involvement with the community?**

- Are the researchers planning to begin any collaboration as a result of the research?
- For clinical research only: Consider the number of hospitals and health care professionals involved and the extent of penetration of the studies throughout the region or the commonwealth.

**Assignment of Performance Review Ratings to Research Projects and Grants**

Research projects within each grant are reviewed and assigned an overall rating by a minimum of three reviewers. These reviewers are experts in the technical fields of the grant projects. They also have been screened for conflicts of interest. Reviewers are instructed not to compare research projects to each other, but to base all comments on the documented evaluation criteria.

The final overall rating for a research project is the average rating obtained from all of the reviewers of each project. If a grant consists of only one research project, the overall grant rating will be the average overall rating for the research project. If the grant consists of more than one research project, the overall grant rating is an average rating for all projects funded by the grant.

The performance review ratings are as follows:

1.00 – 1.33 = Outstanding

1.34 – 2.66 = Favorable

2.67 – 3.00 = Unfavorable

The rating is made according to the following guidelines

- Outstanding indicates that: (1) major strengths were identified throughout the project with few, if any, weaknesses; (2) the project met all or most of its stated objectives; and (3) the project is likely to have some beneficial impact.
- Favorable indicates that: (1) strengths were identified within the project with one or more weaknesses; (2) the project met some of its stated objectives and/or made acceptable progress to do so; and/or (3) the project may or may not have a beneficial impact.
- Unfavorable indicates that: (1) major weaknesses were identified that are pervasive throughout the project; (2) the project did not meet any of its objectives or did not make any acceptable progress to meet the objectives; (3) the project is not likely to have any beneficial impact; (4) insufficient data and information were provided to support the fact that the project met any of its objectives or made acceptable progress; or (5) the information and data provided were not applicable to the project objectives listed in the strategic plan.

The overall rating reflects the adequacy of the research activities performed during the funding period, taking into consideration all of the significant attributes identified in the review, including the following categories:

- Major strength – an attribute of the project or grant that clearly distinguishes it well above the standards set by the program objectives and that provides compelling justification for continued funding
- Strength – a noteworthy attribute of the project or grant compared to the objectives
- Weakness – a noteworthy deficiency or flaw compared to program objectives
- Major weakness – a very serious, if not fatal, flaw or deficiency compared to the objectives or common research practices

### **Use and Impact of Performance Review Reports**

The department sends a report of the performance review to the grantees. The report includes the overall rating for the grant and the ratings for each research project contained in the grant, as well as reviewer comments on the strengths and weaknesses of the research projects and recommendations for future improvement. The department requires that each grantee submit a written response describing how the weaknesses and recommendations will be addressed in future health research grants.

A grant that receives an unfavorable performance review by the department may be subject to a reduction in funding or become ineligible for health research funding in the future. The consequence of receiving one unfavorable grant rating is a written warning outlining the future

funding impacts of subsequent unfavorable ratings. A second consecutive unfavorable grant rating will render the grantee ineligible to receive any nonformula funds in the next funding cycle and will result in a 25 percent reduction in the amount of formula grant funds that the grantee would have received if there were no reduction. A third consecutive unfavorable grant rating will render the grantee ineligible to receive any nonformula funds in the next funding cycle and will result in a 50 percent reduction in the amount of formula grant funds that the grantee would have received if there were no reduction. A fourth consecutive unfavorable grant rating will render the grantee ineligible to receive any nonformula or formula funds in the next funding cycle.

## **Outcomes of Performance Reviews Conducted during the 2013-14 State Fiscal Year**

### **Interim Performance Reviews**

Interim performance reviews were conducted for the two translational genomics nonformula grants that were awarded during the 2011-12 state fiscal year. The grantees had completed approximately 18 months of work in their four-year grants. The purpose of the interim performance review is to evaluate the overall progress of the research projects to date, identify successful projects, and determine if there are any areas of concern in the research project that can be modified to improve the project before it ends. Both grants received a favorable evaluation.

### **Final Performance Reviews**

During the 2013-14 state fiscal year, final performance reviews were finalized for 34 formula grants and four 2008 nonformula grants. Altogether, these grants provided funding to 249 research projects.

Of the 34 formula grants:

- Five grants received an outstanding evaluation.
- Twenty-nine grants received favorable evaluations.

Of the four nonformula grants:

- One grant received an outstanding evaluation.
- Three grants received favorable evaluations.

## **Progress Reports for Research Grants Active during SFY 2013-14**

This report contains a summary of the research progress made by the 2009-10, 2010-11, 2011-12, and 2012-13 grantees during the 2013-14 state fiscal year (July 1, 2013 – June 30, 2014). For information on grants that ended prior to July 1, 2013, refer to prior annual CURE program reports at [www.health.state.pa.us/cure](http://www.health.state.pa.us/cure).

## **Research Development Accomplishments of Formula Grant Recipients**

In accordance with Act 2001-77, the Department of Health requested institutions receiving \$400,000 or more in formula funds to describe various initiatives and activities that they would undertake to enhance the commercialization of research results. The grant applications for these institutions included the following information related to commercialization initiatives:

- A plan for licensure and commercial development of research results;
- Copies of standard agreement forms used to license research results;
- A description of opportunities planned to train researchers about licensing and the commercial development of research;
- Outreach efforts planned to inform the business community of research developments at the institution;
- Plans to establish partnerships with postsecondary educational institutions for training students and health professionals in biomedical research; and
- A plan for collaboration with Pennsylvania's Life Sciences Greenhouses and other institutions to participate in the development of research.

Annual progress reports submitted by grantees receiving \$400,000 or more in formula funds included an update describing accomplishments related to these training, outreach, and commercialization activities. A report of research development activities for the 2013-14 state fiscal year is included with each institution's progress report.

# Financial Report

Of the \$42,952,000 allocated for the Health Research Program for the state fiscal year 2013-14, \$1,173,112 was committed to a contract for performance review, and \$41,778,888 was unavailable for disbursement. This section of the report provides an overview of the health research funding provisions of Act 2001-77 and summarizes the commitments and expenditures for the grants that were awarded during the 2009-10 through 2012-13 state fiscal years. These are the only grants that may have incurred expenditures during the 2013-14 state fiscal year. The financial reports for grants awarded during prior state fiscal years may be viewed in prior annual CURE reports at [www.health.state.pa.us/cure](http://www.health.state.pa.us/cure).

Chapter 3 of Act 2001-77 allocates 19 percent of the tobacco settlement funds for health research. Section 906 funds are divided into two separate types of funds. Seventy percent of Section 906 funds are awarded on the basis of a formula calculated using an institution's average award from the NIH for the past three consecutive years (formula funds). The remaining 30 percent of Section 906 funds (called nonformula funds) are awarded as a result of a competitive bid.

Section 908 further breaks down the distribution of the Section 906 formula funds, reserving 20 percent for institutions which averaged more than \$175 million in NIH funding and 17 percent for institutions that averaged more than \$175 million in federally supported research and development funds as reported by the National Science Foundation and more than \$60 million in NIH funding.

Section 909 funds (formula funds) are allocated to institutions on the basis of a formula calculated using an institution's average award from the National Cancer Institute for the past three years. SFY 2013-14 formula funds were unavailable for disbursement due to an unfavorable arbitration ruling in September 2013 in an ongoing dispute over Master Settlement Agreement (MSA) payments between the state and tobacco product manufacturers that participate in the MSA. As a result of the ruling, the state was forced to freeze discretionary funding from the MSA, which reduced funds in the current year's budget for health research (Commonwealth Universal Research Enhancement [CURE] grants). Consequently, no health research formula grants were awarded to Pennsylvania organizations during SFY 2013-14 by the Health Research Program, and no formula funds were expended.

During the 2013-14 state fiscal year, nonformula funds were redirected to other tobacco settlement programs and were not available for the awarding of nonformula grants.

## **2009-10 Grant Awards and Expenditures**

During the 2009-10 state fiscal year, the department awarded \$53,415,200 in formula grants and \$20,088,283 in nonformula grants. Tables 1 and 5 show the amount of the grant awards and the expenditures for the last five state fiscal years.

## **2010-11 Grant Awards and Expenditures**

The department awarded \$44,440,665 in formula grants and \$16,684,527 in nonformula grants. Tables 2 and 6 show the amount of the grant awards and the expenditures for the last four state fiscal years.

## **2011-12 Grant Awards and Expenditures**

The department awarded \$42,126,900 in formula grants and \$15,364,071 in nonformula grants. Tables 3 and 7 show the amount of the grant awards and the expenditures for the last three state fiscal years.

## **2012-13 Grant Awards and Expenditures**

The department awarded \$41,896,467 in formula grants. Table 4 shows the amount of the grant awards and the expenditures for the last two state fiscal years.

## **2013-14 Grant Awards and Expenditures**

A total of \$42,952,000 was allocated for health research formula funds. A portion of the formula funds was set aside for the performance review contract (\$1,173,112). These services were provided by Oak Ridge Associated Universities (ORAU). The remaining formula funds were set aside for the awarding of health research formula grants. During the certification process, 30 organizations indicated that they were eligible and intended to apply for the formula funds. The process of awarding the SFY 2013-14 formula grants was halted, however, in October 2013 due to the freezing of discretionary funding from the Master Settlement Agreement by the state as a result of an unfavorable arbitration ruling. Therefore, no health research formula grants were awarded, and no formula funds were expended during state fiscal year 2013-14.

## **Anticipated Disbursement Schedule by Fiscal Year**

There were no Health Research Grant recipients in the state fiscal year 2013-14. When grant funds are awarded in a fiscal year, recipients are required to invest the funds in an insured interest-bearing account or in accordance with other investment guidelines contained in the grant agreement. Earnings derived from the investments must be applied toward health research projects approved by the department. Any unspent funds at the completion of the grant award period are returned to the department for reinvestment in the tobacco settlement investment account.

## **Aggregate Amount of Research Grants Awarded to Each Institution**

Some institutions received both formula and nonformula grants. Table 8 provides the aggregated amount of research grants awarded to each institution since the inception of the program.

**Table 1. 2009-10 Formula Grants — Funds Awarded and Summary of Expenditures for State Fiscal Years 2009-10; 2010-11; 2011-12; 2012-13 and 2013-14**

2009-10 Formula Grant Institutions	Funds Awarded	Expenditures SFY 2009-10*	Expenditures SFY 2010-11*	Expenditures SFY 2011-12*	Expenditures SFY 2012-13*	Expenditures SFY 2013-14*
Albert Einstein Healthcare Network	\$119,376.00	\$14,491.51	\$47,128.75	\$56,344.60	\$5,185.84	\$0
Allegheny-Singer Research Institute	\$186,525.00	\$25,836.04	\$162,057.34	\$0	\$0	\$0
American College of Radiology	\$2,043,960.00	\$8,626.10	\$424,959.65	\$1,113,664.14	\$245,370.11	\$223,347.14
Carnegie Mellon University	\$910,547.00	\$61,000.94	\$301,211.41	\$276,551.69	\$184,823.16	\$87,346.27
Children's Hospital of Philadelphia	\$4,034,902.00	\$386,125.32	\$623,885.63	\$723,979.26	\$1,001,931.59	\$959,477.26
Children's Hospital of Pittsburgh	\$1,039,905.00	\$62,786.19	\$476,434.88	\$263,876.52	\$70,484.96	\$161,455.43
Drexel University	\$1,431,165.00	\$385,726.92	\$804,243.62	\$74,346.83	\$59,690.65	\$112,750.09
Duquesne University	\$121,663.00	\$12,310.38	\$29,931.49	\$24,080.50	\$20,485.46	\$28,174.76
Fox Chase Cancer Center	\$3,477,323.00	\$948,220.00	\$1,406,174.00	\$704,398.00	\$340,537.00	\$95,318.00
Geisinger Clinic	\$104,117.00	\$2,506.48	\$58,380.41	\$41,516.72	\$0	\$0
Hepatitis B Foundation	\$1,073.00	\$389.20	\$688.20	\$0	\$0	\$0
Lankenau Institute for Medical Research	\$241,281.00	\$122,727.61	\$118,803.07	\$0	\$0	\$0
Lehigh University	\$119,007.00	\$4,835.06	\$31,008.69	\$16,434.57	\$41,674.53	\$27,211.20
Lincoln University	\$23,171.00	\$0	\$9,000.76	\$14,037.15	\$0	\$0
Magee-Womens Research Institute and Foundation	\$1,541,095.00	\$918,721.82	\$622,374.56	\$0	\$0	\$0
Monell Chemical Senses Center	\$240,428.00	\$124,227.81	\$116,300.12	\$0	\$0	\$0
National Disease Research Interchange	\$73,679.00	\$21,233.11	\$44,906.10	\$0	\$0	\$0
National Surgical Adjuvant Breast and Bowel Project (NSABP) Foundation	\$1,255,581.00	\$26,464.52	\$851,910.53	\$264,781.13	\$92,255.15	\$23,444.95
Pennsylvania State University	\$8,412,824.00	\$185,265.00	\$1,458,076.00	\$676,699.00	\$1,980,696.00	\$4,129,965.00
Philadelphia College of Osteopathic Medicine	\$25,305.00	\$0	\$1,069.26	\$822.74	\$401.14	\$23,253.60
Pittsburgh Tissue Engineering Initiative, Inc.	\$12,224.00	\$2,700.00	\$9,565.26	\$0	\$0	\$0
Public Health Management Corporation <sup>1</sup>	\$21,969.00	\$0	\$21,981.37	\$0	\$0	\$0
Salus University <sup>2</sup>	\$59,678.00	\$8,681.61	\$51,200.49	\$0	\$0	\$0
Temple University	\$2,375,033.00	\$0	\$690,314.83	\$420,643.52	\$647,114.31	\$0
Thomas Jefferson University	\$3,746,521.00	\$686,689.50	\$1,325,424.44	\$879,871.56	\$452,655.04	\$433,114.55
Treatment Research Institute	\$171,222.00	\$11,733.00	\$102,133.00	\$57,992.00	\$0	\$0
University of Pennsylvania	\$9,897,440.00	\$600,340.82	\$1,958,848.54	\$2,533,751.18	\$3,254,115.37	\$1,243,656.64
University of Pittsburgh	\$9,897,440.00	\$2,470,418.00	\$1,882,402.00	\$2,631,006.00	\$2,576,534.00	\$370,239.00
UPMC McKeesport	\$48,585.00	\$8,550.00	\$15,813.00	\$24,284.47	\$0	\$0
West Chester University of Pennsylvania	\$4,080.00	\$0	\$284.20	\$3,274.26	\$0	\$0
Wistar Institute	\$1,778,081.00	\$938,811.11	\$847,470.30	\$0	\$0	\$0
<b>TOTAL</b>	<b>\$53,415,200.00</b>	<b>\$8,039,418.05</b>	<b>\$14,493,981.90</b>	<b>\$10,802,355.84</b>	<b>\$10,973,954.31</b>	<b>\$7,918,753.89</b>

\* Grantees receive the full amount of the grant award at the start of the grant. They must invest the funds in an insured, interest-bearing account and apply earnings derived from the interest toward health research projects. Amounts shown in the expenditures columns include expenditures on funds derived from interest earnings. Therefore, an institution's total expenditures may exceed the amount shown in the "Funds Awarded" column, which shows the amount of the original grant award, excluding any interest earned.

<sup>1</sup> Formerly known as Philadelphia Health Management Corporation <sup>2</sup> Formerly known as Pennsylvania College of Optometry

**Table 2. 2010-11 Formula Grants — Funds Awarded and Summary of Expenditures for State Fiscal Years 2010-11; 2011-12; 2012-13 and 2013-14**

<b>2010-11 Formula Grant Institutions</b>	<b>Funds Awarded</b>	<b>Expenditures SFY 2010-11*</b>	<b>Expenditures SFY 2011-12*</b>	<b>Expenditures SFY 2012-13*</b>	<b>Expenditures SFY 2013-14*</b>
Albert Einstein Healthcare Network	\$74,176.00	\$16,357.85	\$27,343.73	\$30,550.33	\$0
Allegheny-Singer Research Institute	\$120,384.00	\$81,034.28	\$39,239.17	\$0	\$0
American College of Radiology	\$1,700,785.00	\$55,754.87	\$309,793.82	\$249,250.87	\$433,782.02
Carnegie Mellon University	\$860,191.00	\$3,173.18	\$176,038.26	\$370,447.84	\$286,055.28
Children's Hospital of Philadelphia	\$3,548,977.00	\$124,690.81	\$574,061.80	\$1,009,668.47	\$1,057,210.70
Children's Hospital of Pittsburgh	\$527,174.00	\$59,678.80	\$229,628.10	\$219,468.03	\$0
Drexel University	\$1,275,294.00	\$94,346.47	\$923,584.57	\$169,233.83	\$92,512.02
Duquesne University	\$116,091.00	\$19,739.02	\$53,106.39	\$16,598.28	\$13,037.64
Fox Chase Cancer Center	\$2,851,328.00	\$622,203.00	\$1,250,433.00	\$796,396.00	\$193,506.00
Geisinger Clinic	\$80,673.00	\$0	\$80,695.55	\$0	\$0
Haverford College	\$30,855.00	\$2,301.00	\$9,005.00	\$7,061.00	\$5,734.00
Hepatitis B Foundation	\$859.00	\$374.50	\$485.28	\$0	\$0
Indiana University of Pennsylvania	\$9,268.00	\$0	\$2,665.01	\$1,391.44	\$4,071.82
Institute for Hepatitis and Virus Research	\$16,013.00	\$4,334.00	\$11,681.67	\$0	\$0
Lankenau Institute for Medical Research	\$175,518.00	\$77,932.36	\$97,649.10	\$0	\$0
Lehigh University	\$88,081.00	\$11,767.85	\$69,672.69	\$6,956.46	\$0
Lincoln University	\$33,493.00	\$2,500.00	\$30,998.90	\$0	\$0
Madlyn and Leonard Abramson Center for Jewish Life	\$17,571.00	\$0	\$17,589.60	\$0	\$0
Magee-Womens Research Institute and Foundation	\$1,209,415.00	\$448,831.81	\$760,592.25	\$0	\$0
Monell Chemical Senses Center	\$216,916.00	\$66,852.40	\$150,113.84	\$0	\$0
National Disease Research Interchange	\$62,393.00	\$27,700.07	\$26,292.41	\$8,453.52	\$0
National Surgical Adjuvant Breast and Bowel Project (NSABP) Foundation	\$967,922.00	\$17,345.92	\$316,642.29	\$347,026.87	\$71,014.83
Pennsylvania State University	\$7,001,127.00	\$897,653.00	\$1,558,769.00	\$2,382,554.00	\$1,559,319.00
Philadelphia College of Osteopathic Medicine	\$19,326.00	\$5,314.65	\$3,450.45	\$1,616.52	\$9,023.19
Pittsburgh Tissue Engineering Initiative, Inc.	\$9,815.00	\$1,066.48	\$8,759.19	\$0	\$0
Public Health Management Corporation <sup>1</sup>	\$17,081.00	\$153.76	\$16,952.86	\$0	\$0
Salus University <sup>2</sup>	\$45,203.00	\$8,732.36	\$36,511.52	\$0	\$0
Temple University	\$2,050,596.00	\$0	\$747,950.60	\$459,349.64	\$158,144.69
Thomas Jefferson University	\$3,085,950.00	\$182,305.61	\$1,285,901.40	\$1,078,311.82	\$421,661.70
Treatment Research Institute	\$139,351.00	\$12,280.00	\$78,857.00	\$48,832.00	\$0
University of Pennsylvania	\$8,236,620.00	\$151,026.83	\$2,679,609.46	\$1,724,083.80	\$2,103,350.05
University of Pittsburgh	\$8,236,620.00	\$1,007,002.00	\$2,673,345.00	\$2,643,538.00	\$1,250,056.00
UPMC McKeesport	\$32,934.00	\$0	\$32,942.82	\$0	\$0
Wistar Institute	\$1,582,665.00	\$558,727.67	\$1,039,567.95	\$0	\$0
<b>TOTAL</b>	<b>\$44,440,665.00</b>	<b>\$4,561,180.55</b>	<b>\$15,319,929.68</b>	<b>\$11,570,788.72</b>	<b>\$7,658,478.94</b>

\* See footnote on Table 1.

<sup>1</sup> Formerly known as Philadelphia Health Management Corporation <sup>2</sup> Formerly known as Pennsylvania College of Optometry

**Table 3. 2011-12 Formula Grants — Funds Awarded and Summary of Expenditures for State Fiscal Years 2011-12; 2012-13 and 2013-14**

<b>2011-12 Formula Grant Institutions</b>	<b>Funds Awarded</b>	<b>Expenditures SFY 2011-12*</b>	<b>Expenditures SFY 2012-13*</b>	<b>Expenditures SFY 2013-14*</b>
Albert Einstein Healthcare Network	\$52,011.00	\$17,090.50	\$34,926.89	\$0
Allegheny-Singer Research Institute	\$98,254.00	\$15,540.03	\$83,126.27	\$0
American College of Radiology	\$1,777,126.00	\$29,336.40	\$278,096.35	\$552,813.06
Carnegie Mellon University	\$943,032.00	\$12,813.20	\$298,218.95	\$187,792.17
Children's Hospital of Philadelphia	\$3,521,179.00	\$185,024.88	\$787,484.70	\$832,433.80
Children's Hospital of Pittsburgh	\$228,401.00	\$75,380.48	\$146,650.35	\$0
Drexel University	\$1,320,271.00	\$196,185.28	\$901,616.09	\$190,035.00
Duquesne University	\$107,464.00	\$6,956.87	\$72,214.19	\$20,614.43
Fox Chase Cancer Center	\$2,472,183.00	\$1,004,939.00	\$1,171,868.00	\$301,082.00
Geisinger Clinic	\$75,516.00	\$13,559.74	\$47,475.80	\$0
Haverford College	\$28,802.00	\$9,737.00	\$12,428.00	\$6,652.00
Hepatitis B Foundation	\$654.00	\$282.50	\$371.76	\$0
Lankenau Institute for Medical Research	\$136,919.00	\$63,762.36	\$73,192.85	\$0
Lehigh University	\$80,151.00	\$8,829.43	\$37,964.35	\$34,225.77
Lincoln University	\$47,451.00	\$34,262.73	\$11,096.55	\$0
Magee-Womens Research Institute and Foundation	\$971,921.00	\$379,173.21	\$592,751.31	\$0
Monell Chemical Senses Center	\$210,715.00	\$77,210.70	\$133,569.87	\$0
National Disease Research Interchange	\$59,685.00	\$10,879.88	\$48,832.96	\$0
National Surgical Adjuvant Breast and Bowel Project (NSABP) Foundation	\$851,360.00	\$7,717.06	\$379,648.61	\$210,490.28
Pennsylvania State University	\$6,637,701.00	\$257,664.00	\$681,596.00	\$1,302,116.00
Philadelphia College of Osteopathic Medicine	\$16,761.00	\$4,528.77	\$1,793.42	\$0
Pittsburgh Tissue Engineering Initiative, Inc.	\$8,731.00	\$5,618.99	\$1,876.01	\$0
Salus University <sup>1</sup>	\$39,748.00	\$3,787.07	\$36,030.89	\$0
Temple University	\$2,186,053.00	\$254,153.71	\$175,940.42	\$1,085,580.06
Thomas Jefferson University	\$2,899,793.00	\$870,269.87	\$765,464.19	\$382,140.22
Treatment Research Institute	\$155,813.00	\$20,320.00	\$103,644.00	\$32,218.00
University of Pennsylvania	\$7,809,060.00	\$201,675.09	\$1,760,420.38	\$1,166,104.74
University of Pittsburgh	\$7,809,060.00	\$641,269.00	\$2,542,040.00	\$1,971,007.00
University of the Sciences in Philadelphia	\$32,583.00	\$0	\$7,343.47	\$9,002.95
Wistar Institute	\$1,548,502.00	\$740,018.42	\$814,367.06	\$0
<b>TOTAL</b>	<b>\$42,126,900.00</b>	<b>\$5,147,986.17</b>	<b>\$12,002,049.69</b>	<b>\$8,284,307.48</b>

\* See footnote on Table 1.

<sup>1</sup> Formerly known as Pennsylvania College of Optometry

**Table 4. 2012-13 Formula Grants — Funds Awarded and Summary of Expenditures for State Fiscal Years 2012-13 and 2013-14**

<b>2012-13 Formula Grant Institutions</b>	<b>Funds Awarded</b>	<b>Expenditures SFY 2012-13*</b>	<b>Expenditures SFY 2013-14*</b>
Albert Einstein Healthcare Network	\$61,734.00	\$13,371.03	\$48,433.14
Allegheny-Singer Research Institute	\$79,614.00	\$19,184.02	\$48,454.71
American College of Radiology	\$1,851,408.00	\$0	\$291,854.15
Carnegie Mellon University	\$1,028,926.00	\$44,624.73	\$114,736.42
Children's Hospital of Philadelphia	\$3,713,220.00	\$183,703.98	\$1,020,817.92
Drexel University	\$1,401,259.00	\$187,281.27	\$933,669.04
Duquesne University	\$100,224.00	\$16,090.81	\$28,347.88
Geisinger Clinic	\$110,249.00	\$15,100.54	\$58,502.56
Haverford College	\$18,238.00	\$2,445.18	\$2,869.00
Hepatitis B Foundation	\$720.00	\$360.00	\$360.28
Institute for Cancer Research <sup>1</sup>	\$2,176,686.00	\$380,307.00	\$1,722,373.00
Lankenau Institute for Medical Research	\$115,879.00	\$59,794.05	\$30,885.16
Lehigh University	\$75,533.00	\$5,032.50	\$38,180.84
Lincoln University	\$44,916.00	\$0	\$34,428.25
Magee-Womens Research Institute and Foundation	\$1,017,609.00	\$475,875.97	\$541,777.22
Monell Chemical Senses Center	\$234,200.00	\$93,320.64	\$140,941.48
National Disease Research Interchange	\$56,394.00	\$11,812.81	\$44,618.33
National Surgical Adjuvant Breast and Bowel Project (NSABP) Foundation	\$967,037.00	\$0	\$306,423.85
Pennsylvania State University	\$6,589,749.00	\$123,596.00	\$346,788.00
Philadelphia College of Osteopathic Medicine	\$14,266.00	\$5,117.90	\$452.36
Salus University <sup>2</sup>	\$40,030.00	\$2,524.79	\$0
Temple University	\$2,220,937.00	\$938,946.07	\$629,040.74
Thomas Jefferson University	\$2,776,880.00	\$525,803.34	\$1,153,013.66
Treatment Research Institute	\$174,793.00	\$7,706.00	\$167,510.00
University of Pennsylvania	\$7,752,646.00	\$247,241.74	\$4,485,746.64
University of Pittsburgh	\$7,752,646.00	\$782,140.00	\$3,174,804.00
University of the Sciences in Philadelphia	\$29,488.00	\$0	\$15,043.35
Wistar Institute	\$1,491,186.00	\$646,178.82	\$850,245.47
<b>TOTAL</b>	<b>\$41,896,467.00</b>	<b>\$4,787,559.19</b>	<b>\$16,230,317.45</b>

\* See footnote on Table 1.

<sup>1</sup> Formerly known as Fox Chase Cancer Center <sup>2</sup> Formerly known as Pennsylvania College of Optometry

**Table 5. 2009-10 Nonformula Grants — Funds Awarded and Summary of Expenditures for State Fiscal Years 2009-10; 2010-11; 2011-12; 2012-13 and 2013-14**

2009-10 Nonformula Grant Institutions	Funds Awarded	Expenditures SFY 2009-10*	Expenditures SFY 2010-11*	Expenditures SFY 2011-12*	Expenditures SFY 2012-13*	Expenditures SFY 2013-14*
Drexel University (Cancer vaccines)	\$2,769,497.00	\$1,718.30	\$478,145.85	\$629,451.04	\$731,399.40	\$975,143.84
Thomas Jefferson University (Cancer vaccines)	\$4,500,000.00	\$17,088.28	\$858,421.41	\$956,065.27	\$1,161,159.23	\$1,294,079.55
University of Pennsylvania (Cancer vaccines)	\$4,620,420.00	\$11,138.30	\$974,282.29	\$1,058,013.19	\$914,380.43	\$1,663,830.09
University of Pennsylvania (Blindness and visual impairment)	\$4,600,000.00	\$28,095.59	\$1,486,546.38	\$1,331,466.21	\$1,008,977.42	\$749,596.77
Wills Eye Health System (Blindness and visual impairment)	\$3,598,366.00	\$2,874.48	\$747,470.72	\$800,607.21	\$814,369.69	\$1,000,194.04
<b>TOTAL</b>	<b>\$20,088,283.00</b>	<b>\$60,914.95</b>	<b>\$4,544,866.65</b>	<b>\$4,775,602.92</b>	<b>\$4,630,286.17</b>	<b>\$5,682,844.29</b>

\* See footnote on Table 1.

**Table 6. 2010-11 Nonformula Grants — Funds Awarded and Summary of Expenditures for State Fiscal Years 2010-11; 2011-12; 2012-13 and 2013-14**

2010-11 Nonformula Grant Institutions	Funds Awarded	Expenditures SFY 2010-11*	Expenditures SFY 2011-12*	Expenditures SFY 2012-13*	Expenditures SFY 2013-14*
Pennsylvania State University (Substance abuse)	\$2,191,427.00	\$0	\$502,175.09	\$491,233.52	\$523,221.75
Treatment Research Institute (Substance abuse)	\$4,493,185.00	\$3,338.00	\$539,778.00	\$1,068,633.00	\$1,273,261.00
University of Pennsylvania (Substance abuse)	\$4,999,999.00	\$11,653.42	\$1,024,485.01	\$1,667,875.18	\$1,461,356.32
University of Pittsburgh (Substance abuse)	\$4,999,916.00	\$0	\$1,022,089.76	\$941,514.59	\$1,124,199.15
<b>TOTAL</b>	<b>\$16,684,527.00</b>	<b>\$14,991.42</b>	<b>\$3,088,527.86</b>	<b>\$4,169,256.29</b>	<b>\$4,382,038.22</b>

\* See footnote on Table 1.

**Table 7. 2011-12 Nonformula Grants — Funds Awarded and Summary of Expenditures for State Fiscal Years 2011-12; 2012-13 and 2013-14**

<b>2011-12 Nonformula Grant Institutions</b>	<b>Funds Awarded</b>	<b>Expenditures SFY 2011-12*</b>	<b>Expenditures SFY 2012-13*</b>	<b>Expenditures SFY 2013-14*</b>
Apogee Biotechnology Corporation (Cancer commercialization)	\$832,608.00	\$62,616.68	\$489,326.26	\$282,119.40
Carnegie Mellon University (Cancer commercialization)	\$983,783.00	\$0	\$263,884.79	\$662,942.09
Geisinger Clinic (Cancer commercialization)	\$1,000,000.00	\$3,991.55	\$405,945.75	\$498,410.44
Institute for Hepatitis and Virus Research (Cancer commercialization)	\$909,170.00	\$5,588.00	\$379,464.00	\$437,439.00
Oncoceutics, Inc. (Cancer commercialization)	\$1,295,646.00	\$0	\$247,439.77	\$1,051,203.00
The Pennsylvania State University (Cancer commercialization)	\$1,000,000.00	\$6,824.61	\$326,424.37	\$412,504.59
Thomas Jefferson University (Cancer commercialization)	\$744,156.00	\$0	\$305,078.98	\$439,077.02
UE Sciences Inc. (Cancer commercialization)	\$878,244.00	\$38,662.50	\$415,481.46	\$317,016.41
University of Pennsylvania (Cancer commercialization)	\$1,000,000.00	\$0	\$377,007.11	\$616,671.65
The Wistar Institute (Cancer commercialization)	\$991,990.00	\$10,769.60	\$357,134.29	\$542,382.76
Geisinger Clinic (Translational genomics)	\$2,909,969.00	\$22,593.59	\$413,990.00	\$604,197.70
University of Pennsylvania (Translational genomics)	\$2,818,505.00	\$0	\$383,451.06	\$781,928.73
<b>TOTAL</b>	<b>\$15,364,071.00</b>	<b>\$151,046.53</b>	<b>\$4,364,627.84</b>	<b>\$6,645,892.79</b>

\* See footnote on Table 1.

**Table 8. Total Grants Awards** — Formula and Nonformula Funds Awarded for State Fiscal Years 2001-02; 2002-03; 2003-04; 2004-05; 2005-06; 2006-07; 2007-08; 2008-09; 2009-10; 2010-11; 2011-12; 2012-13 and 2013-14

ALL FORMULA AND NONFORMULA GRANT INSTITUTIONS	SFY TOTAL AWARDS					GRAND TOTAL
	SFY 2001-02	SFY 2002-03	SFY 2003-04	SFY 2004-05	SFY 2005-06	
Albert Einstein Healthcare Network	\$96,908	\$168,475	\$186,128	\$182,685	\$165,620	\$1,531,233
	\$147,561	\$141,075	\$135,484	\$119,376	\$74,176	
	\$52,011	\$61,734	\$0			
Allegheny-Singer Research Institute	\$4,240,705	\$307,259	\$264,887	\$209,634	\$226,528	\$6,397,791
	\$223,389	\$237,838	\$202,774	\$186,525	\$120,384	
	\$98,254	\$79,614	\$0			
American Aging Association	\$0	\$0	\$1,875	\$1,706	\$1,699	\$8,727
	\$1,638	\$1,809	\$0	\$0	\$0	
	\$0	\$0	\$0			
American Association for Cancer Research	\$0	\$142,976	\$115,950	\$89,360	\$83,371	\$511,423
	\$79,766	\$0	\$0	\$0	\$0	
	\$0	\$0	\$0			
American College of Radiology	\$0	\$2,053,097	\$2,156,639	\$2,372,081	\$2,590,126	\$23,634,802
	\$2,511,654	\$2,433,581	\$2,144,345	\$2,043,960	\$1,700,785	
	\$1,777,126	\$1,851,408	\$0			
Apogee Biotechnology Corporation	\$0	\$0	\$0	\$0	\$0	\$832,608
	\$0	\$0	\$0	\$0	\$0	
	\$832,608	\$0	\$0			
Arcadia University	\$0	\$0	\$0	\$0	\$17,426	\$32,581
	\$15,155	\$0	\$0	\$0	\$0	
	\$0	\$0	\$0			

**Table 8. Total Grants Awards (continued)**

ALL FORMULA AND NONFORMULA GRANT INSTITUTIONS	SFY TOTAL AWARDS					GRAND TOTAL
	SFY 2001-02	SFY 2002-03	SFY 2003-04	SFY 2004-05	SFY 2005-06	
Bryn Mawr College	\$9,368	\$8,581	\$10,932	\$9,536	\$9,544	\$82,486
	\$10,431	\$11,524	\$12,570	\$0	\$0	
	\$0	\$0	\$0			
Carnegie Mellon University	\$4,362,007	\$1,081,443	\$962,758	\$822,602	\$737,186	\$14,800,523
	\$649,424	\$710,806	\$747,818	\$910,547	\$860,191	
	\$1,926,815	\$1,028,926	\$0			
Children's Hospital of Philadelphia	\$2,800,005	\$3,727,099	\$3,657,085	\$8,419,246	\$7,612,406	\$58,309,020
	\$3,315,523	\$5,609,842	\$8,349,536	\$4,034,902	\$3,548,977	
	\$3,521,179	\$3,713,220	\$0			
Children's Hospital of Pittsburgh	\$479,289	\$720,940	\$723,892	\$700,355	\$722,169	\$7,712,756
	\$732,956	\$879,637	\$958,038	\$1,039,905	\$527,174	
	\$228,401	\$0	\$0			
Delaware Water Gap Science Institute	\$15,998	\$0	\$0	\$0	\$0	\$15,998
	\$0	\$0	\$0	\$0	\$0	
	\$0	\$0	\$0			
Donald Guthrie Foundation for Education and Research	\$39,698	\$55,570	\$46,918	\$34,542	\$21,219	\$197,947
	\$0	\$0	\$0	\$0	\$0	
	\$0	\$0	\$0			
Drexel University *	\$164,560	\$197,969	\$6,130,470	\$1,100,707	\$1,055,561	\$20,249,429
	\$1,048,705	1,138,730	\$1,215,241	\$4,200,662	\$1,275,294	
	\$1,320,271	\$1,401,259	\$0			

**Table 8. Total Grants Awards (continued)**

Drexel University College of Medicine *	SFY 2001-02 \$2,243,051	SFY 2002-03 \$1,445,034	SFY 2003-04 \$0	SFY 2004-05 \$0	SFY 2005-06 \$0	\$3,688,085
	SFY 2006-07 \$0	SFY 2007-08 \$0	SFY 2008-09 \$0	SFY 2009-10 \$0	SFY 2010-11 \$0	
	SFY 2011-12 \$0	SFY 2012-13 \$0	SFY 2013-14 \$0			
Duquesne University	SFY 2001-02 \$75,689	SFY 2002-03 \$100,115	SFY 2003-04 \$89,848	SFY 2004-05 \$89,469	SFY 2005-06 \$82,990	\$1,133,553
	SFY 2006-07 \$71,320	SFY 2007-08 \$84,549	SFY 2008-09 \$94,131	SFY 2009-10 \$121,663	SFY 2010-11 \$116,091	
	SFY 2011-12 \$107,464	SFY 2012-13 \$100,224	SFY 2013-14 \$0			
Family Planning Council	SFY 2001-02 \$0	SFY 2002-03 \$0	SFY 2003-04 \$18,107	SFY 2004-05 \$14,582	SFY 2005-06 \$12,184	\$44,873
	SFY 2006-07 \$0	SFY 2007-08 \$0	SFY 2008-09 \$0	SFY 2009-10 \$0	SFY 2010-11 \$0	
	SFY 2011-12 \$0	SFY 2012-13 \$0	SFY 2013-14 \$0			
Geisinger Clinic	SFY 2001-02 \$167,916	SFY 2002-03 \$183,198	SFY 2003-04 \$163,358	SFY 2004-05 \$128,587	SFY 2005-06 \$110,724	\$5,311,957
	SFY 2006-07 \$89,315	SFY 2007-08 \$92,771	SFY 2008-09 \$95,564	SFY 2009-10 \$104,117	SFY 2010-11 \$80,673	
	SFY 2011-12 \$3,985,485	SFY 2012-13 \$110,249	SFY 2013-14 \$0			
Haverford College	SFY 2001-02 \$0	SFY 2002-03 \$0	SFY 2003-04 \$0	SFY 2004-05 \$0	SFY 2005-06 \$0	\$77,895
	SFY 2006-07 \$0	SFY 2007-08 \$0	SFY 2008-09 \$0	SFY 2009-10 \$0	SFY 2010-11 \$30,855	
	SFY 2011-12 \$28,802	SFY 2012-13 \$18,238	SFY 2013-14 \$0			
Hepatitis B Foundation	SFY 2001-02 \$0	SFY 2002-03 \$0	SFY 2003-04 \$0	SFY 2004-05 \$0	SFY 2005-06 \$0	\$14,918
	SFY 2006-07 \$5,368	SFY 2007-08 \$3,707	SFY 2008-09 \$2,537	SFY 2009-10 \$1,073	SFY 2010-11 \$859	
	SFY 2011-12 \$654	SFY 2012-13 \$720	SFY 2013-14 \$0			
Immaculata University	SFY 2001-02 \$4,962	SFY 2002-03 \$6,378	SFY 2003-04 \$5,090	SFY 2004-05 \$0	SFY 2005-06 \$0	\$16,430
	SFY 2006-07 \$0	SFY 2007-08 \$0	SFY 2008-09 \$0	SFY 2009-10 \$0	SFY 2010-11 \$0	
	SFY 2011-12 \$0	SFY 2012-13 \$0	SFY 2013-14 \$0			

**Table 8. Total Grants Awards (continued)**

Indiana University of Pennsylvania	SFY 2001-02 \$0	SFY 2002-03 \$0	SFY 2003-04 \$0	SFY 2004-05 \$0	SFY 2005-06 \$0	\$9,268
	SFY 2006-07 \$0	SFY 2007-08 \$0	SFY 2008-09 \$0	SFY 2009-10 \$0	SFY 2010-11 \$9,268	
	SFY 2011-12 \$0	SFY 2012-13 \$0	SFY 2013-14 \$0			
Institute for Cancer Research *	SFY 2001-02 \$3,831,779	SFY 2002-03 \$4,508,784	SFY 2003-04 \$3,818,851	SFY 2004-05 \$3,195,298	SFY 2005-06 \$3,001,121	\$38,271,527
	SFY 2006-07 \$2,768,335	SFY 2007-08 \$3,038,276	SFY 2008-09 \$3,131,563	SFY 2009-10 \$3,477,323	SFY 2010-11 \$2,851,328	
	SFY 2011-12 \$2,472,183	SFY 2012-13 \$2,176,686	SFY 2013-14 \$0			
Institute for Hepatitis and Virus Research	SFY 2001-02 \$0	SFY 2002-03 \$0	SFY 2003-04 \$0	SFY 2004-05 \$0	SFY 2005-06 \$0	\$925,183
	SFY 2006-07 \$0	SFY 2007-08 \$0	SFY 2008-09 \$0	SFY 2009-10 \$0	SFY 2010-11 \$16,013	
	SFY 2011-12 \$909,170	SFY 2012-13 \$0	SFY 2013-14 \$0			
Juniata College	SFY 2001-02 \$0	SFY 2002-03 \$0	SFY 2003-04 \$0	SFY 2004-05 \$0	SFY 2005-06 \$9,495	\$18,840
	SFY 2006-07 \$9,345	SFY 2007-08 \$0	SFY 2008-09 \$0	SFY 2009-10 \$0	SFY 2010-11 \$0	
	SFY 2011-12 \$0	SFY 2012-13 \$0	SFY 2013-14 \$0			
Lankenau Institute for Medical Research	SFY 2001-02 \$307,220	SFY 2002-03 \$409,168	SFY 2003-04 \$346,399	SFY 2004-05 \$287,621	SFY 2005-06 \$244,328	\$2,914,195
	SFY 2006-07 \$212,216	SFY 2007-08 \$214,033	SFY 2008-09 \$223,613	SFY 2009-10 \$241,281	SFY 2010-11 \$175,518	
	SFY 2011-12 \$136,919	SFY 2012-13 \$115,879	SFY 2013-14 \$0			
Lehigh University	SFY 2001-02 \$84,515	SFY 2002-03 \$117,425	SFY 2003-04 \$127,442	SFY 2004-05 \$131,021	SFY 2005-06 \$130,662	\$1,295,409
	SFY 2006-07 \$116,229	SFY 2007-08 \$116,442	SFY 2008-09 \$108,901	SFY 2009-10 \$119,007	SFY 2010-11 \$88,081	
	SFY 2011-12 \$80,151	SFY 2012-13 \$75,533	SFY 2013-14 \$0			
Lincoln University *	SFY 2001-02 \$17,070	SFY 2002-03 \$19,364	SFY 2003-04 \$21,977	SFY 2004-05 \$22,412	SFY 2005-06 \$20,913	\$250,767
	SFY 2006-07 \$0	SFY 2007-08 \$0	SFY 2008-09 \$0	SFY 2009-10 \$23,171	SFY 2010-11 \$33,493	
	SFY 2011-12 \$47,451	SFY 2012-13 \$44,916	SFY 2013-14 \$0			
Madlyn and Leonard Abramson Center for Jewish Life	SFY 2001-02 \$32,827	SFY 2002-03 \$41,864	SFY 2003-04 \$48,506	SFY 2004-05 \$39,055	SFY 2005-06 \$35,639	\$234,473
	SFY 2006-07 \$19,011	SFY 2007-08 \$0	SFY 2008-09 \$0	SFY 2009-10 \$0	SFY 2010-11 \$17,571	
	SFY 2011-12 \$0	SFY 2012-13 \$0	SFY 2013-14 \$0			

**Table 8. Total Grants Awards (continued)**

Magee-Womens Research Institute and Foundation	SFY 2001-02 \$544,531	SFY 2002-03 \$681,269	SFY 2003-04 \$683,748	SFY 2004-05 \$631,282	SFY 2005-06 \$600,197	\$10,568,273
	SFY 2006-07 \$598,185	SFY 2007-08 \$894,069	SFY 2008-09 \$1,194,952	SFY 2009-10 \$1,541,095	SFY 2010-11 \$1,209,415	
	SFY 2011-12 \$971,921	SFY 2012-13 \$1,017,609	SFY 2013-14 \$0			
Medical Diagnostic Research Foundation	SFY 2001-02 \$0	SFY 2002-03 \$57,612	SFY 2003-04 \$62,239	SFY 2004-05 \$58,488	SFY 2005-06 \$50,384	\$228,723
	SFY 2006-07 \$0	SFY 2007-08 \$0	SFY 2008-09 \$0	SFY 2009-10 \$0	SFY 2010-11 \$0	
	SFY 2011-12 \$0	SFY 2012-13 \$0	SFY 2013-14 \$0			
Mercy Hospital of Pittsburgh	SFY 2001-02 \$28,721	SFY 2002-03 \$0	SFY 2003-04 \$0	SFY 2004-05 \$0	SFY 2005-06 \$0	\$28,721
	SFY 2006-07 \$0	SFY 2007-08 \$0	SFY 2008-09 \$0	SFY 2009-10 \$0	SFY 2010-11 \$0	
	SFY 2011-12 \$0	SFY 2012-13 \$0	SFY 2013-14 \$0			
Monell Chemical Senses Center	SFY 2001-02 \$257,357	SFY 2002-03 \$312,634	SFY 2003-04 \$284,558	SFY 2004-05 \$302,317	SFY 2005-06 \$281,629	\$3,029,473
	SFY 2006-07 \$256,897	SFY 2007-08 \$213,928	SFY 2008-09 \$217,894	SFY 2009-10 \$240,428	SFY 2010-11 \$216,916	
	SFY 2011-12 \$210,715	SFY 2012-13 \$234,200	SFY 2013-14 \$0			
MPC Corporation	SFY 2001-02 \$218,236	SFY 2002-03 \$266,553	SFY 2003-04 \$246,020	SFY 2004-05 \$193,969	SFY 2005-06 \$160,481	\$1,498,157
	SFY 2006-07 \$160,944	SFY 2007-08 \$136,227	SFY 2008-09 \$115,727	SFY 2009-10 \$0	SFY 2010-11 \$0	
	SFY 2011-12 \$0	SFY 2012-13 \$0	SFY 2013-14 \$0			
National Disease Research Interchange	SFY 2001-02 \$57,995	SFY 2002-03 \$80,999	SFY 2003-04 \$77,132	SFY 2004-05 \$59,884	SFY 2005-06 \$55,546	\$745,449
	SFY 2006-07 \$49,644	SFY 2007-08 \$53,760	SFY 2008-09 \$58,338	SFY 2009-10 \$73,679	SFY 2010-11 \$62,393	
	SFY 2011-12 \$59,685	SFY 2012-13 \$56,394	SFY 2013-14 \$0			
National Surgical Adjuvant Breast and Bowel Project (NSABP) Foundation	SFY 2001-02 \$0	SFY 2002-03 \$0	SFY 2003-04 \$2,278,516	SFY 2004-05 \$1,856,715	SFY 2005-06 \$1,588,633	\$13,646,641
	SFY 2006-07 \$1,286,019	SFY 2007-08 \$1,306,064	SFY 2008-09 \$1,288,794	SFY 2009-10 \$1,255,581	SFY 2010-11 \$967,922	
	SFY 2011-12 \$851,360	SFY 2012-13 \$967,037	SFY 2013-14 \$0			

**Table 8. Total Grants Awards (continued)**

Oncoceutics, Inc.	SFY 2001-02 \$0	SFY 2002-03 \$0	SFY 2003-04 \$0	SFY 2004-05 \$0	SFY 2005-06 \$0	\$1,295,646
	SFY 2006-07 \$0	SFY 2007-08 \$0	SFY 2008-09 \$0	SFY 2009-10 \$0	SFY 2010-11 \$0	
	SFY 2011-12 \$1,295,646	SFY 2012-13 \$0	SFY 2013-14 \$0			
Oncology Nursing Society	SFY 2001-02 \$24,693	SFY 2002-03 \$28,676	SFY 2003-04 \$33,420	SFY 2004-05 \$31,527	SFY 2005-06 \$32,860	\$213,341
	SFY 2006-07 \$26,655	SFY 2007-08 \$23,037	SFY 2008-09 \$12,473	SFY 2009-10 \$0	SFY 2010-11 \$0	
	SFY 2011-12 \$0	SFY 2012-13 \$0	SFY 2013-14 \$0			
Pennsylvania State University	SFY 2001-02 \$7,390,257	SFY 2002-03 \$9,286,165	SFY 2003-04 \$13,948,556	SFY 2004-05 \$8,225,637	SFY 2005-06 \$7,845,194	\$109,016,095
	SFY 2006-07 \$11,408,096	SFY 2007-08 \$11,450,510	SFY 2008-09 \$7,628,852	SFY 2009-10 \$8,412,824	SFY 2010-11 \$9,192,554	
	SFY 2011-12 \$7,637,701	SFY 2012-13 \$6,589,749	SFY 2013-14 \$0			
Philadelphia College of Osteopathic Medicine	SFY 2001-02 \$9,517	SFY 2002-03 \$16,087	SFY 2003-04 \$0	SFY 2004-05 \$0	SFY 2005-06 \$0	\$153,917
	SFY 2006-07 \$15,859	SFY 2007-08 \$19,760	SFY 2008-09 \$17,036	SFY 2009-10 \$25,305	SFY 2010-11 \$19,326	
	SFY 2011-12 \$16,761	SFY 2012-13 \$14,266	SFY 2013-14 \$0			
Philadelphia FIGHT	SFY 2001-02 \$55,224	SFY 2002-03 \$66,088	SFY 2003-04 \$62,772	SFY 2004-05 \$42,916	SFY 2005-06 \$29,970	\$256,970
	SFY 2006-07 \$0	SFY 2007-08 \$0	SFY 2008-09 \$0	SFY 2009-10 \$0	SFY 2010-11 \$0	
	SFY 2011-12 \$0	SFY 2012-13 \$0	SFY 2013-14 \$0			
Pittsburgh Tissue Engineering Initiative	SFY 2001-02 \$0	SFY 2002-03 \$0	SFY 2003-04 \$22,965	SFY 2004-05 \$23,447	SFY 2005-06 \$26,589	\$166,366
	SFY 2006-07 \$25,651	SFY 2007-08 \$21,247	SFY 2008-09 \$15,697	SFY 2009-10 \$12,224	SFY 2010-11 \$9,815	
	SFY 2011-12 \$8,731	SFY 2012-13 \$0	SFY 2013-14 \$0			
Public Health Management Corporation *	SFY 2001-02 \$0	SFY 2002-03 \$0	SFY 2003-04 \$19,349	SFY 2004-05 \$11,489	SFY 2005-06 \$6,505	\$118,878
	SFY 2006-07 \$7,898	SFY 2007-08 \$14,218	SFY 2008-09 \$20,369	SFY 2009-10 \$21,969	SFY 2010-11 \$17,081	
	SFY 2011-12 \$0	SFY 2012-13 \$0	SFY 2013-14 \$0			
Salus University *	SFY 2001-02 \$38,785	SFY 2002-03 \$47,559	SFY 2003-04 \$48,971	SFY 2004-05 \$45,969	SFY 2005-06 \$52,203	\$594,905
	SFY 2006-07 \$52,788	SFY 2007-08 \$63,639	SFY 2008-09 \$60,332	SFY 2009-10 \$59,678	SFY 2010-11 \$45,203	
	SFY 2011-12 \$39,748	SFY 2012-13 \$40,030	SFY 2013-14 \$0			

**Table 8. Total Grants Awards (continued)**

Swarthmore College	SFY 2001-02 \$0	SFY 2002-03 \$0	SFY 2003-04 \$0	SFY 2004-05 \$7,697	SFY 2005-06 \$0	\$7,697
	SFY 2006-07 \$0	SFY 2007-08 \$0	SFY 2008-09 \$0	SFY 2009-10 \$0	SFY 2010-11 \$0	
	SFY 2011-12 \$0	SFY 2012-13 \$0	SFY 2013-14 \$0			
Temple University	SFY 2001-02 \$2,189,275	SFY 2002-03 \$8,231,989	SFY 2003-04 \$7,351,100	SFY 2004-05 \$2,165,659	SFY 2005-06 \$6,186,915	\$40,760,388
	SFY 2006-07 \$1,839,493	SFY 2007-08 \$1,957,901	SFY 2008-09 \$2,005,437	SFY 2009-10 \$2,375,033	SFY 2010-11 \$2,050,596	
	SFY 2011-12 \$2,186,053	SFY 2012-13 \$2,220,937	SFY 2013-14 \$0			
Thomas Jefferson University	SFY 2001-02 \$4,922,826	SFY 2002-03 \$6,229,638	SFY 2003-04 \$5,488,272	SFY 2004-05 \$8,200,818	SFY 2005-06 \$8,413,995	\$61,730,602
	SFY 2006-07 \$3,674,642	SFY 2007-08 \$3,591,514	SFY 2008-09 \$3,455,597	SFY 2009-10 \$8,246,521	SFY 2010-11 \$3,085,950	
	SFY 2011-12 \$3,643,949	SFY 2012-13 \$2,776,880	SFY 2013-14 \$0			
Treatment Research Institute	SFY 2001-02 \$0	SFY 2002-03 \$62,697	SFY 2003-04 \$75,727	SFY 2004-05 \$78,251	SFY 2005-06 \$97,407	\$5,875,040
	SFY 2006-07 \$119,268	SFY 2007-08 \$148,376	SFY 2008-09 \$158,950	SFY 2009-10 \$171,222	SFY 2010-11 \$4,632,536	
	SFY 2011-12 \$155,813	SFY 2012-13 \$174,793	SFY 2013-14 \$0			
UE LifeSciences Inc.	SFY 2001-02 \$0	SFY 2002-03 \$0	SFY 2003-04 \$0	SFY 2004-05 \$0	SFY 2005-06 \$0	\$878,244
	SFY 2006-07 \$0	SFY 2007-08 \$0	SFY 2008-09 \$0	SFY 2009-10 \$0	SFY 2010-11 \$0	
	SFY 2011-12 \$878,244	SFY 2012-13 \$0	SFY 2013-14 \$0			
University of Pennsylvania	SFY 2001-02 \$8,694,420	SFY 2002-03 \$19,312,867	SFY 2003-04 \$15,657,124	SFY 2004-05 \$16,302,480	SFY 2005-06 \$11,229,640	\$171,021,190
	SFY 2006-07 \$16,885,133	SFY 2007-08 \$16,698,663	SFY 2008-09 \$14,506,173	SFY 2009-10 \$19,117,860	SFY 2010-11 \$13,236,619	
	SFY 2011-12 \$11,627,565	SFY 2012-13 \$7,752,646	SFY 2013-14 \$0			
University of Pittsburgh	SFY 2001-02 \$20,288,781	SFY 2002-03 \$20,278,241	SFY 2003-04 \$10,877,580	SFY 2004-05 \$14,547,334	SFY 2005-06 \$13,381,559	\$156,005,917
	SFY 2006-07 \$8,472,940	SFY 2007-08 \$12,801,469	SFY 2008-09 \$16,662,331	SFY 2009-10 \$9,897,440	SFY 2010-11 \$13,236,536	
	SFY 2011-12 \$7,809,060	SFY 2012-13 \$7,752,646	SFY 2013-14 \$0			

**Table 8. Total Grants Awards (continued)**

University of the Sciences in Philadelphia	SFY 2001-02 \$12,149	SFY 2002-03 \$9,779	SFY 2003-04 \$0	SFY 2004-05 \$0	SFY 2005-06 \$0	\$83,999
	SFY 2006-07 \$0	SFY 2007-08 \$0	SFY 2008-09 \$0	SFY 2009-10 \$0	SFY 2010-11 \$0	
	SFY 2011-12 \$32,583	SFY 2012-13 \$29,488	SFY 2013-14 \$0			
UPMC McKeesport	SFY 2001-02 \$0	SFY 2002-03 \$0	SFY 2003-04 \$0	SFY 2004-05 \$0	SFY 2005-06 \$0	\$240,075
	SFY 2006-07 \$58,248	SFY 2007-08 \$47,237	SFY 2008-09 \$53,071	SFY 2009-10 \$48,585	SFY 2010-11 \$32,934	
	SFY 2011-12 \$0	SFY 2012-13 \$0	SFY 2013-14 \$0			
West Chester University	SFY 2001-02 \$0	SFY 2002-03 \$0	SFY 2003-04 \$0	SFY 2004-05 \$0	SFY 2005-06 \$0	\$4,080
	SFY 2006-07 \$0	SFY 2007-08 \$0	SFY 2008-09 \$0	SFY 2009-10 \$4,080	SFY 2010-11 \$0	
	SFY 2011-12 \$0	SFY 2012-13 \$0	SFY 2013-14 \$0			
Wills Eye Health System *	SFY 2001-02 \$11,119	SFY 2002-03 \$11,779	SFY 2003-04 \$11,748	SFY 2004-05 \$9,146	SFY 2005-06 \$8,591	\$3,650,749
	SFY 2006-07 \$0	SFY 2007-08 \$0	SFY 2008-09 \$0	SFY 2009-10 \$3,598,366	SFY 2010-11 \$0	
	SFY 2011-12 \$0	SFY 2012-13 \$0	SFY 2013-14 \$0			
Wistar Institute	SFY 2001-02 \$1,397,012	SFY 2002-03 \$1,751,632	SFY 2003-04 \$5,099,020	SFY 2004-05 \$1,531,984	SFY 2005-06 \$1,474,006	\$27,151,069
	SFY 2006-07 \$5,569,982	SFY 2007-08 \$1,473,209	SFY 2008-09 \$1,461,800	SFY 2009-10 \$1,778,081	SFY 2010-11 \$1,582,665	
	SFY 2011-12 \$2,540,492	SFY 2012-13 \$1,491,186	SFY 2013-14 \$0			
<b>TOTAL — ALL INSTITUTIONS</b>	SFY 2001-02 \$65,114,465	SFY 2002-03 \$82,027,003	SFY 2003-04 \$81,225,929	SFY 2004-05 \$72,177,508	SFY 2005-06 \$68,413,215	<b>\$797,495,302</b>
	SFY 2006-07 \$62,535,683	SFY 2007-08 \$65,629,448	SFY 2008-09 \$66,355,938	SFY 2009-10 \$73,503,483	SFY 2010-11 \$61,125,192	
	SFY 2011-12 \$57,490,971	SFY 2012-13 \$41,896,467	SFY 2013-14 \$0			

\* Drexel University College of Medicine, originally MCP Hahnemann in SFY 2001-02, was combined with Drexel University in SFY 2003-04.

\* Lincoln University did not start their SFY2006-07 grant and returned their entire formula grant award \$15,403 + interest \$595.74 to the commonwealth on 9/9/08.

\* Public Health Management Corporation was formerly known as Philadelphia Health Management Corporation (July 2008).

\* Salus University was formerly known as Pennsylvania College of Optometry (July 2008).

\* Wills Eye Health System was formerly known as Wills Eye Hospital (July 2009).

\* Institute for Cancer Research was formerly known as Fox Chase Cancer Center (July 2012).